### MICHIGAN ENDODONTICS EXAMINATION BROCHURE

Be sure that you have submitted your examination application and appropriate fee to the Bureau of Health Professions, Department Community Health, prior to the deadline date in order to be scheduled for the examination. If you have not received an examination application, call the Bureau at (517) 335-0918.

# 2004 MICHIGAN ENDODONTICS EXAMINATION BROCHURE

#### **INTRODUCTION:**

The credentialing examination for Endodontics is designed to measure the knowledge, skills and abilities deemed essential to protect the public's health, safety and welfare.

#### **EXAMINATION SCHEDULE:**

The Endodontics examination will be given on **June 7 - 8, 2004**. After the Bureau has approved you to take the examination, an Admission Letter will be sent to you. This document will specify the room to which you must report for the examination. You must be in the examination room prior to **8:15 a.m.** on the first day. A general schedule of the examination is included in this brochure.

The test center is located at the University of Michigan, School of Dentistry, Ann Arbor, MI. Information regarding the location of the site can be found at the back of this brochure. Parking may be a problem and should be factored into your schedule for arriving at the site. There will be a fee for parking.

<b>DATE</b> Day 1	<b>TIME</b> 8:15 A.M.	PROCEDURE Submission of Case Histories
	9:00 A.M.	Written Examination (3 hours)
Day 2	8:30 A.M.	Oral Examination & Case History Review (Approximately 2 hours) You should be at the site ½ hour prior to your scheduled oral exam time

You must plan on being at the examination for both days even if you are sitting for only one section of the examination.

#### SPECIAL ACCOMMODATIONS:

If you require special accommodations because of a disability, a letter that specifies the disability and requested accommodation(s) must be submitted to the Bureau of Health Professions. A physician or other licensed professional qualified to diagnose and treat the disability must provide detailed documentation of the disability. Requests for accommodations must be received no later than one month prior to the examination. However, because of the time required to review documentation and the possible need for additional information; your request should be mailed as early as possible. A letter approving or denying your request will be sent following the review of the information submitted.

Submit your request and relevant documentation to:

Rae Ramsdell
Bureau of Health Professions
MI Department of Community Health
PO Box 30670
Lansing, MI 48909

#### **ADMISSION REQUIREMENTS:**

In order to be admitted to EACH part of the examination, you MUST:

- 1. **BE ON TIME**. You will NOT be admitted to the examination after it has begun.
- 2. PRESENT THE ADMISSION LETTER that will be sent to you approximately two weeks prior to the examination. If you have not received an Admission Letter one week prior to the exam, you should call the Bureau of Health Professions, Department of Community Health, at (517) 335-0918. If you do not have your Admission Letter, you may still be admitted to the examination provided that your name is included on the site roster. The site coordinator will make this decision. If admitted, a substitute Admission Letter will be prepared for you at the time of checkin. At the conclusion of the examination, all candidates must submit their Admission Letter as verification of attendance at the examination. It is your responsibility to turn in your Admission Letter to the testing staff at the conclusion of the examination.
- 3. **PRESENT OFFICIAL SIGNED PHOTOGRAPHIC IDENTIFICATION.** Acceptable identification includes a <u>valid</u> Michigan driver license or another state issued driver license, Secretary of State identification, passport, government-issued identification, school identification, or employment identification. The identification presented MUST include BOTH a photograph and signature. <u>Without the required identification</u>, you will not be permitted to take the examination.

If you do not present the required signed photographic identification or you are late to the scheduled examination section, you will NOT be allowed to take the examination/section and you will forfeit your examination fee. You will be required to submit a new examination application and fee for the next regularly scheduled administration.

#### CANDIDATE ANONYMITY

You will be assigned a unique candidate identification number that will be included on your Admission Letter. With the exception of the written examination, you must record **ONLY** your candidate identification number on all examination materials to be scored. To maintain confidentiality, you should NOT introduce yourself by name to the examiners.

#### **EXAMINATION CONDUCT:**

No reference materials may be utilized during any part of this examination. Textbooks, notebooks, briefcases, large purses, pagers, cell phones, and beepers should NOT be brought to your seat. Neither the State nor the University will be responsible for any loss of items brought to the examination site.

Cheating is defined as any activity; behavior or procedure that a candidate employs that would enable him/her to pass an examination by dishonest, fraudulent, or deceitful means. Examples of cheating would be, but are not limited to, obtaining questions and/or answers from another candidate, copying from another's answer sheet, using prepared notes during the examination, discussing the examination with others during the examination, referring to textbooks, informing other candidates of oral questions prior to their taking that section, or having someone else take the examination for the candidate.

Absolutely no copying of examination items is permitted. Anyone found removing, or attempting to remove, test materials or notes from the examination room may be denied licensure.

You will be required to sign a statement, at the time of the examination, agreeing to not divulge the contents of the examination.

#### MATERIAL TO BE BROUGHT TO THE EXAMINATION

You will need to supply the following:

- 1. A tape recorder and two (2) 90 minute cassette tapes -- The tapes will be retained at the conclusion of the oral examination. **Make certain that the tape recorder works properly**. You are responsible for the quality and clarity of the recording. If you fail to bring a recorder, it does not operate properly, or you do not record the entire orals, you will not be permitted to review and/or appeal your results should you fail the oral examination. You must give your tape(s) to the testing staff at the conclusion of your oral examination.
- 2. Case Histories -- As described later in this brochure.
- 3. Two **#2** lead pencils for the written examination.

#### **EXAMINATION FORMAT**

The examination is divided into three sections -- Written, Oral Examination, and Case Histories.

#### I. Written Examination

This portion of the examination will consist of one hundred (100) multiple-choice items covering the scope of knowledge required of an Endodontist. The allotted time for the written section is three (3) hours.

The written examination will include, <u>but not be limited to</u>, the following topics.

<u>Clinical Examination</u> (5%) – Patient's medical and dental history; dental examination <u>Differential Diagnoses</u> (5%) – Dental, systemic, oral pathology

<u>Treatment Planning</u> (20%) – Medically compromised patients, dental restorability, periodontal concerns, emergency treatment, alternative treatment

**Endodontic Treatment** (45%) – Vital pulp therapy, trauma, surgical & nonsurgical endodontics, materials & instruments, radiography

<u>Pain, Pharmacology & Anesthesia</u> (10%) – antibiotics, analgesics, anesthetics. **Medical Emergencies** (5%)

<u>Basic Sciences</u> (10%) – Anatomy, physiology, morphology, pulpal anatomy & physiology, inflammation, microbiology, pathology.

Your answers to the multiple-choice items **MUST** be recorded on the machine scorable answer sheet that will be provided. All marks must be entered with a #2 lead pencil and must be **DARK.** Be sure that no stray marks appear on the answer sheet as they may be misread as answers. If you change your mind on an item, be sure to erase the incorrect answer completely.

It is best to answer all items, even if you are not sure of the answer. There is no penalty for guessing. There is **ONE BEST** answer for each item.

The science and practice of Endodontics encompasses a broad scope of biologic and clinical knowledge. It is expected that your specialty training has covered the subject matter and topics included in this examination.

The written examination is intended to test your knowledge and competence in all of the previously stated topics. All questions have been researched to ensure accuracy. A list of references has been included in this brochure to aid you in your preparations.

**NOTE**: If you have passed the American Board of Endodontics' written examination, you can waive the written portion of the Michigan examination. The American Board must submit a letter verifying passage of the American Board written examination to:

Bureau of Health Professions, Application Unit MI Department of Community Health PO Box 30670 Lansing, MI 48909

#### II. Oral Examination

This portion of the examination must be tape recorded by you.

You will be examined on an individual basis for approximately two (2) hours. A series of radiographs, slides, information, and/or other materials will be used to generate questions. Each candidate will be presented with the same materials from which the same initial set of

questions will be asked. However, the examiners may ask additional questions if they feel you are deficient in certain areas. Additional questions pertaining only to <u>your</u> cases may be asked of you, but will not be asked of other candidates.

The purpose of this portion of the examination is to allow you to demonstrate your knowledge as it applies to clinical situations. The following list of subjects is a general guide that can be used when preparing for the examination.

- 1. The normal anatomy and histology of the teeth and their investing tissues
- 2. The processes of inflammation, healing and repair
- 3. The mechanisms and physiology of the spread of infection
- 4. The physiology and psychology of pain
- 5. The principles and techniques of radiology and radiographic interpretation
- 6. Physical diagnostic procedures and tests
- 7. The use and pharmacologic action of local anesthetics, analgesics, drugs, and drug interactions
- 8. The effects and relationships of systemic disease to the oral cavity
- 9. The management of medical emergencies
- 10. Dental materials and instruments related to endodontics
- 11. Endodontic diagnostic procedures and their interpretation
- 12. Discrimination between periapical lesions of pulpal origin, periapical lesions of nonpulpal origin, and normal structure resembling periapical lesions
- 13. Diagnosis and treatment planning for pulp and periapical pathosis
- 14. Treatment modalities of all endodontic procedures and adjunctive treatments

You should answer questions briefly, yet in a manner that demonstrates knowledge of the subject. At the same time, you should be prepared to answer in greater detail when required.

The oral examination will consist of a series of questions worth a total of 100 points.

#### III. Case Histories:

The purpose of the case histories is to demonstrate your ability to diagnose, develop a treatment plan, and treat a variety of Endodontic situations.

The examiners strongly recommend that the cases be written in the format required by the American Board of Endodontics (ABE). Diagnoses should be made according to the ABE. Information regarding this format may be requested by calling (800) 872-3636.

**NOTE:** You should <u>number</u> and <u>label</u> each case for ease of scoring by the examiners.

You must present 16 case histories following the outline below:

- 1. Eight Molars (labeled A1 A8)
- 2. Two Premolars (labeled B1 and B2)
- 3. One Atypical Treatment Case such as: trauma, treatment of perforations, resorptions, implants, transplants, hemisection, root amputation, endo-perio, endo-ortho, or apexogenesis (**labeled C**)
- 4. Three Surgical Cases -- One must be a Posterior Case (labeled D1 D3)
- 5. One non-surgical Retreatment case (labeled E)
- 6. One Completed Apexification Case with the root canal obturated. If you do not have an apexification case or have a partially completed case, a detailed description of how you would treat such a case should be presented (labeled F)

#### Case Histories must include:

- 1. Significant medical findings
- 2. History of treatment (including biopsy reports)
- 3. History of medications
- 4.\* Pre-treatment radiograph and post-treatment radiograph
- 5.\* Treatment radiographs (this includes electronic images)
- 6.\* Follow-up radiographs, biopsy reports and clinical findings when available

**NOTE**: All treatment entries and radiographs MUST be dated.

#### Casebook Format:

Your Candidate Number Only, Not Your Name, Should Appear on the Cover of Your Casebook.

- 1. Table of Contents
- 2. Radiographs and slides for Cases A E clearly labeled as A1- A8, B1- B2, C1 C2, D1-D3, E (Dates must be on all of the radiographs, printed photos, and/or intraoral photographs or slides)

**Radiographs**: Since radiographs may fall out during transportation of the binders, side loading pockets (opening toward the punches) are recommended for the radiographs. The radiographs should be placed with the dimple up (anatomic orientation) in the pocket, with the long dimension of the packets oriented vertically.

Slides: Slide protector sheets are recommended for the slides. Only one case

<sup>\*</sup> Original radiographs and slides are required. If duplicates must be used, you must include, in the casebook, an explanation as to why the originals are not available. A signed statement must accompany this explanation from the institution denying you the use of the originals.

should be displayed in each slide sheet and should be labeled clearly, including the dates.

Since slides may fall out during transportation of the binders, side loading pockets (opening toward the punches) are recommended for the photographs.

Place a tab (separator of some type) in front of this section labeled Radiographs

3. Histories for Cases A - F clearly labeled

Place a tab (separator of some type) in front of this section labeled <u>Histories</u>. A separator (tab) labeled A, B, C, D, E or F should be placed before each set of cases.

Case histories must be given to the examination administrator during check-in on the first day of the examination.

The examiners will review the case histories on the first day. The casebook is graded as a whole with equal weighting for criteria such as examination, diagnosis, prognosis, treatment planning and therapy. Points may be deducted if the casebook is poorly organized. The examiners may ask questions regarding your Casebook during the Oral Examination. The Case Histories section is worth 100 points.

All case material will be returned to the candidates upon completion and scoring of the examination.

You will be required to sign a statement at the examination site testifying that you were solely responsible for the work completed on the cases presented for scoring.

**NOTE:** An insufficient number of case histories is grounds for failure of this section of the examination. A report or thesis project will **not** be accepted as a substitution for the required cases.

#### **SCORING OF THE EXAMINATION**

The written examination will be machine scored. All other sections of the examination will be evaluated by at least two examiners. Each examiner will evaluate the sections independently and the final score for each section will be the average of all examiners' scores.

During the course of the examination, the examiners may use expressions such as "That's okay" or "fine". These comments should **NOT** be construed as anything other than a polite way of completing a checkpoint or proceeding to another topic.

In order to pass the examination, you must receive a score of 75% in **EACH** section of the examination. Those sections in which you receive a score of **LESS** than 75% may be

repeated once in a 18-month period. Should you **NOT** receive a 75% in each section taken during the second attempt, you will be required to retake the entire examination.

Your score(s) will be released in approximately six weeks following the last day of the examination. Results will NOT be provided over the phone nor will they be released to a third party unless you have submitted a signed written request to the Bureau of Health Professions for the release of your results to a specific third party.

If you receive a score of **PASS**, this will be the only information available as to your success on the examination. Actual numeric scores are **NOT** available.

If you **FAIL** the examination, your numeric score(s) along with a breakdown of your performance on each section failed will be provided. This information is intended to assist you in preparing for re-examination.

#### **REVIEW AND APPEAL OF FAILED EXAMINATION**

Should you fail an examination section, you may request a personal review of the examination documents.

1. Complete the Request for Review form that will be included with your Notice of Failure, along with a cashier's check or money order in the amount of \$50.00 made payable to the "State of Michigan". Send the form and payment within thirty (30) calendar days of the Notice of Failure date to:

Dr. Kara Schmitt KNK Consulting 2956 Dobie Road Mason. MI 48854

- 2. The review will be conducted in the Lansing area. A specific time and location will be included with your Notice of Failure.
- 3. The review will be limited to a sight review ONLY. You will have one-half of the amount of time allocated for the administration of the failed section (*i.e.*, if two hours were allocated for the administration of a section, you would have one hour for the review of that section). Notes made by you during the review may NOT be removed from the room nor copied. Reference materials may be brought to the review.
- 4. The review will be limited to the area(s) of failure ONLY.

- 5. At the conclusion of the review, you must decide whether or not you wish to appeal your results. If you decide to appeal, you may submit for consideration any information or documentation that pertains to the failed section(s) of the examination.
- 6. All questions, comments, and documentation made by you will be submitted to the Endodontics Examination Committee for review. The committee's decision will be forwarded to the Michigan Board of Dentistry.
- 7. The Michigan Board of Dentistry will take action on the recommendation(s) presented.
- 8. Following the Board's decision, the Bureau of Health Professions will notify you of the results of your appeal.

#### **SUGGESTED REFERENCES**

The most recent editions of the following books and journals may assist you in your preparation for the examination. An effort is made to use the most current edition of a textbook. The following list of references is <u>suggestive</u> in nature; **IT IS NOT ALL INCLUSIVE.** 

A.M.A. Drug Evaluations, A.M.A. Division of Drugs, W.B. Saunders Co.

Andreasen & Andreasen, <u>Textbook and Color Atlas of Traumatic Injuries to Teeth</u>, C.V. Mosby

Andreasen, Jens O., Traumatic Injuries of the Teeth, W.B. Saunders Co.

Arens, D., et al., Endodontic Surgery, Harper and Row Publishing.

Bell W.E., <u>Orofacial Pains: Classification, Diagnosis and Management,</u> Year Book Publishers.

Bellizzi, R., Loushine R. A Clinical Atlas of Endodontic Surgery, Quintessence Books.

<u>Clinician's Guide to Treatment of Medically Compromised Dental Patients</u>, Academy of Oral Medicine

Cohen, S., and Burns, R., <u>Pathways of the Pulp</u>, C.V. Mosby.

Cottone, J.A, et al., Practical Infection Control, Lea and Febiger.

"Endodontics" <u>Dental Clinics of North America</u>, W.B. Saunders Co., Editions 18:2 (1974), 23:4 (1979), 28:4 (1984), 36:2 (1992).

Gerstein, Harold. Techniques in Clinical Endodontics, W.B. Saunders Co.

Goaz and White, Oral Radiology, Mosby Year Book, Inc.

Goodman and Gilman, <u>The Pharmacological Basis of Therapeutics</u>, MacMillan Publishing Co.

Goth, A., Medical Pharmacology, C.V. Mosby.

Gray, Henry, Anatomy of the Human Body, Lea and Febiger.

Greenspan, et al., AIDS and the Mouth, Munksgard Publ.

Grossman, L.I. Oliet S., DelRio, C.E., Endodontic Practice, Lea and Febiger.

Gutman, J.L, et al., Problem Solving in Endodontics, Year Book Medical Publishers.

Gutman, J.L, Harrison, J.W., <u>Surgical Endodontics</u>, Blackwell Scientific Publications.

Hansten, P.D., <u>Drug Interactions</u>, Lea and Febiger.

Holroyd, S.V., et. al., Clinical Pharmacology in Dental Practice, C.V. Mosby.

Ingle, J.I., Taintor, J., Endodontics, Lea and Febiger.

Little, J.W, Falace, D.A., <u>Dental Management of the Medically Compromised Patient</u>, C.V. Mosby.

Mahan, P.E, Alling, C.C., Facial Pain, Lea and Febiger.

Malamed, S., Handbook of Local Anesthesia, C.V. Mosby.

Malamed, S., <u>Handbook of Medical Emergencies in the Dental Office</u>, C.V. Mosby.

Monhiem, L.M., Local Anesthesia and Pain Control in Dental Practice, C.V. Mosby.

National Council on Radiation Protection and Measurement, Report 43, 1975.

Newman, M., Kornman., <u>Antibiotic/Antimicrobial Use in Dental Practice</u>, Quintessence Books.

Radiographic Pitfalls, Eastman Kodak, 1982

Roitt I, et. al., <u>Immunology</u>, C. V. Mosby.

Schuster, G.S., Oral Microbiology and Infectious Disease, B.C. Decker Publishing Co.

Seltzer, S., <u>Endodontology: Biologic Considerations in Endodontic Procedures</u>, Lea and Febiger.

Seltzer, S., <u>Inflammation:</u> An <u>Update</u>, Research and Education Foundation, American Association of Endodontists.

Seltzer, S., Pain Control in Dentistry: Diagnosis and Management, J.B. Lippincott Co.

Seltzer, S., Bender, I.B., <u>The Dental Pulp</u>, J.B. Lippincott Co.

Shafer, Hine and Levy., A Textbook of Oral Pathology, W.B. Saunders Co.

TenCate, A.R., Oral Histology: Development, Structure and Function, C.V. Mosby.

- Topazian, R.G, Goldberg, M.H., <u>Management of Infections of the Oral and Maxillofacial Regions</u>, W.B. Saunders Co.
- Travell, J.G, Simons, D.G., <u>Myofacial Pain and Dysfunction: The Trigger Point Manual</u>, William and Wilkens.
- Tronstad, L., Clinical Endodontics, Theime Medical Publishers.
- Trowbridge, H.O., Emling, R.C., <u>Inflammation: A Review of the Process</u>, Quintessence Books.
- Walton, R.E., Torabinejad, M. Principles and Practices of Endodontics, W.B. Saunders.
- Weine, F.S., Endodontic Therapy, C.V. Mosby.
- Wood, N.K, Goaz, P.W., <u>Differential Diagnosis of Oral Lesions</u>, Mosby Year Book, Inc.
- Wynn, Richard, Meiller, Timothy, and Crossley, Harold. <u>Drug Information Handbook for Dentistry</u>. Lexi-Comp.

#### **JOURNALS AND PERIODICALS**

The candidate should be knowledgeable in both the **Classic Endodontic Literature** as well as important articles from the **Current Literature**.

#### SPECIFIC ISSUES

Relevant Alpha Omegan Scientific Issues dealing with Endodontics

Journal of Dental Research, "The Biology of Dentin and Pulp: Proceedings of International Workshop of NIDR and AIDR Pulp Biology Group", Special Issue April, 1985. Journal of Endodontics, "Proceedings of the First World Conference on Dental and Pulpal

<sup>&</sup>quot;Journal of the American Dental Association"

<sup>&</sup>quot;Journal of Dental Research"

<sup>&</sup>quot;Journal of Endodontics"

<sup>&</sup>quot;International Endodontics Journal"

<sup>&</sup>quot;Oral Surgery, Oral Medicine and Oral Pathology"

<sup>&</sup>quot;Endodontic Traumatology"

Pain: Mechanisms and Management", 12:10, October, 1986.

Journal of Endodontics, "Festchrift Issue", 11:11, November, 1985.

"Facts about Aids", JADA Supplement, July, 1991.

"OSHA's Bloodborne Pathogens Standard", JADA Supplement, February, 1992.

"Infection Control Recommendations for the Dental Office", JADA Supplement, August, 1992.

"Safety and Infection Control", JADA Monograph, 1990.

"Patients with HIV and AIDS", ADA Guidelines, September, 1990.

## UNIVERSITY OF MICHIGAN SCHOOL OF DENTISTRY

### 1011 North University Avenue Ann Arbor, MI

Located at the corner of North University and Fletcher Streets
Across from the Michigan League

For easier and more efficient address and parking information, you can access the schools website at: <a href="https://www.dent.umich.edu">www.dent.umich.edu</a> then click on directions and parking.

For local accommodations, click on the Ann Arbor Convention Bureau website at: <a href="https://www.annarbor.org">www.annarbor.org</a>